

**Scholar** All articles - [Recent articles](#) Results 1 - 100 of about 7,750 for "virtual address" and "virtual memory" and table. (1.22 seconds)

[Memory coherence in shared virtual memory systems- \\*swarthmore.edu](#) [PS]

K Li, P Hudak - ACM Transactions on Computer Systems (TOCS), 1989 - portal.acm.org

... single virtual address space. ... Memory Coherence in Shared Virtual Memory Systems ... Table

I. Spectrum of Solutions to the Memory Coherence Problem Page ownership ...

[Cited by 1404](#) - [Related articles](#) - [Web Search](#) - [All 24 versions](#)

[Machine-independent virtual memory management for pageduniprocessor and multiprocessor architectures- \\*kley.us](#) [PDF]

R Rashid, A Tevanian Jr, M Young, D Golub, R Baron ... - IEEE Transactions on Computers, 1988 - ieeexplore.ieee.org

... A task includes a paged virtual address space and protected access to system resources

(such as processors ... TABLE I MACH VIRTUAL MEMORY INTERFACE FUNCTIONAL ...

[Cited by 321](#) - [Related articles](#) - [Web Search](#) - [All 79 versions](#)

[Virtual memory mapped network interface for the SHRIMP multicomputer- \\*kfupm.edu.sa](#) [PDF]

MA Blumrich, K Li, R Alpert, C Dubnicki, EW Felten ... - International Symposium on Computer Architecture, 1996 - portal.acm.org

... consumes the same amount of virtual address space ... Table 2: Software overhead of message

passing primi ... Overall, we conclude that the virtual memory mapped network ...

[Cited by 458](#) - [Related articles](#) - [Web Search](#) - [GI Direct](#) - [All 19 versions](#)

[Virtual memory- \\*cmu.edu](#) [PDF]

PJ Denning - ACM Computing Surveys (CSUR), 1970 - portal.acm.org

... As mentioned earlier, virtual memory may be used to give the ... there is no requirement

that every virtual address "represent" or ... MECHANISM -r 1 I MAP TABLE f I ...

[Cited by 414](#) - [Related articles](#) - [Web Search](#) - [All 16 versions](#)

[lvy: A shared virtual memory system for parallel computing](#)

K Li, J Carter, J Bennett, W Zwanepeol - Distributed Shared Memory: Concepts and Systems, 1997 - books.google.com

... The shared virtual memory provides a virtual address space that is ... The shared virtual

memory address space is in the high ... data structure of the page table it a ...

[Cited by 271](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

[\[PDF\] \\*Mach: A new kernel foundation for UNIX development](#)

M Accetta, R Baron, W Bolosky, D Golub, R Rashid, ... - contract - cse.nd.edu

... process slots, file descriptor slots and page tables. ... These include a virtual address

space and a set of ... Regions of virtual memory may be marked as inheritable ...

[Cited by 1569](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 11 versions](#)

[Virtual memory primitives for user programs- \\*berkeley.edu](#) [PDF]

AW Appel, K Li - ACM SIGPLAN Notices, 1991 - portal.acm.org

... one virtual address: at one address the page is access- ... the same page table,

so that expensive page-table con- ... 3 Virtual memory applications ...

[Cited by 243](#) - [Related articles](#) - [Web Search](#) - [All 40 versions](#)

[\[PDF\] \\*Pin-down cache: A virtual memory management technique for zero-copy communication](#)

H Tezuka, FO Carroll, A Hori, Y Ishikawa - 12th Int. Parallel Processing Symposium, 1998 - gdgib.gotdns.com

... the user program to pin a user virtual memory area to ... Since the virtual address of

the message buffer is mapped ... copy is further investi- gated in Table 1. In ...

[Cited by 114](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 14 versions](#)

[\[PDF\] \\*A study of replacement algorithms for virtual-storage computer](#)

LA Gelady - IBM systems journal, 1966 - users.informatik.uni-halle.de

... For several reasons, it would be advantageous to rid the programmer of this function

by providing him with a "virtual" memory larger than his pro- gram. ...

[Cited by 858](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 6 versions](#)

[PDF] • **Virtual memory: Issues of implementation**

B Jacob, T Mudge - IEEE computer, 1996 - ece.umd.edu

... location through a different virtual address could cause ... wire down a region of

**virtual memory** is to ... Page table entries Mapping information is organized into ...

[Cited by 61](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [BI Direct](#) - [All 26 versions](#)

**Generic virtual memory management for operating system kernels**

E Abrossimov, M Rozler, M Shapiro - Proceedings of the twelfth ACM symposium on Operating ... 1989 - portal.acm.org

... **Table 4: GMI: cache management** ... is referred to as the PVM (Paged Virtual Memory Manager)

and ... I Support for large, sparse segments and large virtual address spaces ...

[Cited by 117](#) - [Related articles](#) - [Web Search](#) - [All 6 versions](#)

**The integration of virtual memory management and interprocess communication in Accent**

R Fitzgerald, RF Rashid - ACM Transactions on Computer Systems (TOCS), 1986 - portal.acm.org

... **Virtual memory** store operations cause WriteFaults ... are qualified by the process and

**virtual address** at which ... are AddressFaults if there is no VP Table entry for ...

[Cited by 109](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

**Virtual memory address translation mechanism with combined hash address table and inverted page ...**

PD Heister, RO Simpson - US Patent 4,880,700, 1987 - Google Patents

... **memory**. The conversion or translation mechanism includes a combined **table** in the

**memory** which includes a first list covering the respective **virtual address** of ...

[Cited by 38](#) - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

**Lightweight recoverable virtual memory**- [saga.edu](#) [PDF]

M Salyanarayanan, HH Mashburn, P Kumar, DC Steere, ... - ACM Transactions on Computer Systems (TOCS), 1994 - portal.acm.org

... **University Recoverable virtual memory** refers to regions of a **virtual address**

**space** on which transactional guarantees are offered, ...

[Cited by 166](#) - [Related articles](#) - [Web Search](#) - [BI Direct](#) - [All 64 versions](#)

**Virtual-memory-mapped network interfaces**

MA Blumrich, G Dubnick - EW Fellen, K Li, MR ... - IEEE Micro, 1995 - ieeeexplore.ieee.org

... at the **virtual-memory** level, **virtual-address** translation hardware ... **network** interface

to support **virtual-memory** mapping in ... is the **network interface page table**. ...

[Cited by 116](#) - [Related articles](#) - [Web Search](#) - [BI Direct](#) - [All 2 versions](#)

**The Quadrics network: High-performance clustering technology**- [vls.edu](#) [PDF]

F Petrin, W Feng, A Hoisie, S Coll, E ... - IEEE Micro, 2002 - ieeeexplore.ieee.org

... In a conventional **virtual-memory** system, each user ... tion number that selects the

**MMU table** set and ... **memory** using a context value and a **virtual address**. ...

[Cited by 516](#) - [Related articles](#) - [Web Search](#) - [BI Direct](#) - [All 69 versions](#)

... **evaluation of two home-based lazy release consistency protocols for shared virtual memory systems**- [knapton.edu.sa](#) [PDF]

Y Zhou, L Hilde, K Li - usenix.org

... supported by other software shared **virtual memory** systems, such as ... In our

implementations, all **virtual address** space can be ... in the post switch **table** and calls ...

[Cited by 222](#) - [Related articles](#) - [Web Search](#) - [BI Direct](#) - [All 17 versions](#)

**Design and implementation of virtual memory-mapped communication on myrinet**- [psu.edu](#) [PDF]

G Dubnick, A Bilas, K Li, J Philbin - 11 th International Parallel Processing Symposium (IPPS'97), 1997 - ieeeexplore.ieee.org

... data from sender's local **virtual memory** to a ... A request consists of a local **virtual**

**address** specifying send ... The incoming page table (one per interface) has ...

[Cited by 88](#) - [Related articles](#) - [Web Search](#) - [All 21 versions](#)

[PDF] • **Stability in a persistent store based on a large virtual memory**

J Rosenberg, F Henskens, AL Brown, R Morrison, D ... - Proceedings of the International Workshop on Architectural ... - dcs.st-and.ac.uk

... maintenance of all of the **virtual memory** tables, free space ... recursively on the page

**tables** themselves, considerably ... This allows the **virtual address** space to be ...

[Cited by 64](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 4 versions](#)

### Virtual memory address translation mechanism with controlled data persistence

A Chang, J Cocke, MF Merger, G Radin - US Patent 4,638,426, 1987 - Google Patents  
... the dual functions of converting **virtual memory** addresses generated ... which con-verts the **virtual address** into an ... special set of translation tables referred to ...

[Cited by 49](#) - [Related articles](#) - [Web Search](#) - [All 9 versions](#)

### Shared virtual address translation unit for a multiprocessor system

Y Fukunaga, T Bando, H Matsumoto, R Hirao, J ... - US Patent 4,481,573, 1984 - Google Patents  
... and it is present **SHARED VIRTUAL ADDRESS TRANSLATION** the memory access to the translation table for the ... present invention relates to a **virtual memory** 5 tion ...

[Cited by 61](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

### Plural virtual address space processing system

K Inoue, H Nonogaki, T Urakawa, K Shimizu - US Patent 4,145,735, 1979 - Google Patents  
... is registered in common to the **virtual address** spaces though ... hanced efficiency of use of the table TLB ... systems usually adopt the so-called **virtual memory** system ...

[Cited by 63](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

### [book] Koan: a shared virtual memory for the ipsc/2 hypercube- \*klupm.edu.sa [PDF]

Z Lahjomri, T Priol - 1991 - Springer  
... knowledge for every page of the **virtual address** space ... resulting matrix are stored in the shared **virtual memory**. Table 4 summarized the results we obtained with ...

[Cited by 63](#) - [Related articles](#) - [Web Search](#) - [All 12 versions](#)

### A survey of recoverable distributed shared virtual memory systems- \*klupm.edu.sa [PDF]

C Morin, I Puaut - IEEE Transactions on parallel and Distributed Systems, 1997 - [ieeexplore.ieee.org](#)  
... in [21], [5] allows processes to share a unique **paged virtual address** space in ... performance when the shared data size is less than a **virtual memory** page (the ...

[Cited by 61](#) - [Related articles](#) - [Web Search](#) - [El. Direct](#) - [All 12 versions](#)

### Architectural support for translation table management in large address space machines- \*unomaha.edu [PDF]

J Huck, J Hays - ACM SIGARCH Computer Architecture News, 1993 - [portal.acm.org](#)  
... mapping is a single translation from a **virtual address**, local to ... **Virtual memory** translation is often specified by the ... in terms of a memory-based table with the ...

[Cited by 169](#) - [Related articles](#) - [Web Search](#) - [El. Direct](#) - [All 12 versions](#)

### [PDF] \*Improving release-consistent shared virtual memory using automatic update

L Ifode, C Dubnicki, EW Felten, K Li - The 2nd IEEE Symposium on High-Performance Computer ..., 1996 - Citeseer  
... **Virtual address** space ... The common approach to the rst problem is to use the **virtual memory** translation hardware to ... Table 1: System Parameters Used in Simulation ...

[Cited by 141](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 16 versions](#)

### AVM: Application-level virtual memory- \*psu.edu [PDF]

DR Engler, SK Gupta, MF Kaashoek - Hot Topics in Operating Systems, 1995.(HotOS-V), Proceedings ..., 1995 - [ieeexplore.ieee.org](#)  
... base cost of looking up a **virtual address** in the ... due to the overhead of parsing the page-table. ... Figure 1: **Virtual memory** benchmarks; times are in micro-seconds ...

[Cited by 46](#) - [Related articles](#) - [Web Search](#) - [All 15 versions](#)

### Virtual-address caches. Part 1: problems and solutions in uniprocessors

M Cekicov, M Dubois - IEEE Micro, 1997 - [ieeexplore.ieee.org](#)  
... Unit of memory allocation in a **virtual memory** sys- tem Page table: Dictionary of ... and yielding the physical page number **Virtual address**: Processor-computed ...

[Cited by 46](#) - [Related articles](#) - [Web Search](#) - [El. Direct](#) - [All 3 versions](#)

### Dynamic improvement of locality in virtual memory systems

JL Baer, GR Sager - IEEE Transactions on Software Engineering, 1976 - [ieeexplore.ieee.org](#)  
... Index Terms-**Virtual memory**, paging, locality, replacement algo- ... More specifically, if a is the **virtual address** referenced at time ...

[Cited by 47](#) - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

**[PDF] •Virtual memory in contemporary microprocessors**

B Jacob, T Mudge - IEEE Micro, 1998 - Giteaser

... their support for some core **virtual-memory** functions. ... memory structure that caches only **page table** entries (PTEs ... the system can translate a **virtual address** to a ...

[Cited by 65](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [Bib. Direct](#) - [All 65 versions](#)

**Static grouping of small objects to enhance performance of a paged virtual memory**

JW Siamos - ACM Transactions on Computer Systems (TOCS), 1984 - portal.acm.org

... The **virtual memory** simulator is a two-level demand-paged ... the field offset, and this **table** to calculate ... object, since at most one **virtual address** was assigned ...

[Cited by 110](#) - [Related articles](#) - [Web Search](#)

**Coherency for multiprocessor virtual address caches**

JR Goodman - Proceedings of the second international conference on ... 1987 - portal.acm.org

... If the **virtual address** is the same as that found ... the choice of page size for **virtual memory**, particularly appropriate ... is the size of the **page table**, which can ...

[Cited by 26](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

**[PDF] •Microkernels meet recursive virtual machines**

B Ford, M Hitler, J Lepreau, P Tullman, G Bank, S ... - ACM SIGOPS Operating Systems Review, 1996 - eprints.kdum.edu.sa

... **memory manager** can be run within the process manager to provide **virtual memory** to an ... type create(objp) Create a new object of type type at **virtual address** objp ...

[Cited by 186](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [Bib. Direct](#) - [All 16 versions](#)

**Virtual memory management for database systems**

IL Traiger - ACM SIGOPS Operating Systems Review, 1982 - portal.acm.org

... The operating system has its own mechanisms for buffering **virtual memory** pages into real memory. **Page map tables** are maintained by the operating system so that ...

[Cited by 91](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

**Virtual memory addressing device**

JA Anderson, RV Van Gelder, LF Yazollino, JE Braun - US Patent 4,376,297, 1983 - Google Patents

... for translating a logical or **virtual address** into a ... the class adapted for 30 **virtual memory** operation and ... processor for storing a **directory table** origin value ...

[Cited by 22](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

**Tempest and Typhoon: User-level shared memory- \*wisc.edu [PDF]**

SK Reinhardt, JR Larus, DA Wood - Proceedings of the 21ST annual international symposium on ..., 1994 - portal.acm.org

... **Virtual memory** systems typically provide this form of access ... **TABLE 1**. Operations on tagged memory blocks ... maps the physical page to the desired **virtual address**. ...

[Cited by 401](#) - [Related articles](#) - [Web Search](#) - [Bib. Direct](#) - [All 33 versions](#)

**Software support for virtual memory-mapped communication- \*kdum.edu.sa [PDF]**

C Dubnicki, L Ifode, EW Felten, K Li - Parallel Processing Symposium, 1996.. Proceedings of IPPS'96 ..., 1996 - ieeeexplore.ieee.org

... Essentially, **virtual memory**-mapped communication is a mechanism for protected data transfer from the sender's **virtual address** space to the receiver's ...

[Cited by 74](#) - [Related articles](#) - [Web Search](#) - [All 17 versions](#)

**[PDF] •The performance of message-passing using restricted virtual memory remapping**

SY Tzou, DP Anderson - Software: Practice and Experience, 1991 - cs.ubc.ca

... for remapping, and a page's **virtual address** does not ... **Virtual memory** remapping is a class of techniques for ... on most machines, updating a **page table** entry is ...

[Cited by 48](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 9 versions](#)

**WSCLOCK—a simple and effective algorithm for virtual memory management- \*uka.de [PDF]**

RW Carr, JL Hennessy - Proceedings of the eighth ACM symposium on Operating systems ..., 1981 - portal.acm.org

... A task is modeled by a **virtual address** space  $P = \{ P_i \dots \}$  system where the total of all task **virtual memory** is many ... of main memory, minimization of **page tables** is an ...

[Cited by 64](#) - [Related articles](#) - [Web Search](#) - [All 17 versions](#)

The duality of memory and communication in the implementation of a multiprocessor operating system- \*utoronto.ca [PDF]

M Young, A Tevanian, R Rashid, D Gotub, J Eppinger - Proceedings of the eleventh ACM Symposium on Operating ... 1987 - portal.acm.org  
... Table 3-2: Port Operations ... **Virtual Memory Management** A task's address space consists of an ... memory regions anywhere within the **virtual address** space defined by ...

Cited by 242 - Related articles - Web Search - All 52 versions

HiPEC: high performance external **virtual memory** caching- \*utah.edu [PDF]

CH Lee, MC Chen, RC Chang - Proceedings of the 1st USENIX conference on Operating ... 1994 - portal.acm.org  
... Integer, or as complex as the **virtual memory** page structure ... of each command are listed in Table 1. Each ... Find 00001111 op1 op2 ag Given **virtual address** op2 , nd ...

Cited by 55 - Related articles - Web Search - All 6 versions

[PDF] \*LogTM: Log-based transactional memory

KE Moore, J Bobba, MJ Moravan, MD Hill, DA Wood - Proceedings of the 12th International Symposium on High- ... 2008 - hpcacoonf.org  
... for each thread's stack, page table entries and ... thread (a) have new values in (**virtual**) **memory**, (b) are ... isolated, and (c) have their (**virtual**) **address** and pre ...

Cited by 263 - Related articles - View as HTML - Web Search - All 6 versions

[PDF] \*Implementing a large **virtual memory** in a distributed computing system

DA Abramson, JL Keedy - Proceedings of the 18th Hawaii International Conference on ... 1985 - csse.monash.edu.au  
... architecture, which interprets a unique **virtual address** as a four ... In effect the **virtual memory** is divided into- 'address ... space has its own separate page table. ...

Cited by 35 - Related articles - Web Search

The Wisconsin Wind Tunnel: virtual prototyping of parallel computers- \*kfuqm.edu.sa [PDF]

SK Reinhardt, MD Hill, JR Larus, AR Lebeck, JC ... - ACM SIGMETRICS Performance Evaluation Review, 1993 - portal.acm.org  
... The first tech- nique is fine-grained shared **virtual memory**, which ... nx% M **virtual Address** Specs space l stack 1) 4 v Segmem Slacn Private Data { Segment VH ...

Cited by 313 - Related articles - Web Search - Bit Direct - All 15 versions

Method to control I/O accesses in a multi-tasking **virtual memory** virtual machine type data ...

KE Duval, AD Hooten - US Patent 4,742,447. 1988 - Google Patents  
... store one page of data, file table entry contains ... a buffer capacity of the **virtual memory** is 1 ... ar- rangements for generating the **virtual address**, depend- ing ...

Cited by 47 - Related articles - Web Search - All 3 versions

**Virtual Memory System**

US Patent 3,781,806. 1973 - Google Patents  
... optionally be used to extend the **virtual address** to provide ... would have over four billion bytes of **virtual memory**. ... as an index to an entry in the segment table. ...

Cited by 34 - Related articles - Web Search - All 2 versions

Mate: A tiny virtual machine for sensor networks- \*harvard.edu [PDF]

P Lewis, D Culler - ACM SIGOPS Operating Systems Review, 2002 - portal.acm.org  
... Communication I Radio RFM TRI000 Rate (Kbps) l0 l 10 [l0] l0 10/40 OOK Modulation type OOK/ASK Table 1: The family of Berkeley TinyOS motes ...

Cited by 615 - Related articles - Web Search - Bit Direct - All 58 versions

Software emulation of bank-switched memory using a virtual DOS monitor and paged memory management

GA Stiman, WC Crossway, SB Preston, JS Flannigan - US Patent 4,926,322. 1990 - Google Patents  
... ENTRY (PAGE TABLE DIRECTORY BASE) PAGE TABLE DIRECTORY (1024 ENTRIES) OFFSET PG.TBENTRY 4GB PHYSICAL ADDRESS 4KB PAGE PAGE TABLES \* PHYSICAL (1024 ENTRIES ...

Cited by 76 - Related articles - Web Search - All 3 versions

Recoverable distributed shared **virtual memory**

KL Wu, WK Fuchs - IEEE Transactions on Computers, 1990 - IEEEexplore.ieee.org  
... can be integrated with the shared **virtual memory** management protocol ... keeps its own local page table, indicating its ... each page in the shared **virtual address** space ...

Cited by 163 - Related articles - Web Search - All 6 versions

### Computer system employing virtual memory

JE Smith, GE Dermer, MA Goldsmith - US Patent 4,774,659, 1988 - Google Patents  
... a translation descriptor from the table in mem ... any memory corresponding to the virtual memory page 55 ory ... containing the referenced virtual address and transfers ...  
[Cited by 41](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

### Garbage collection in a large LISP system- \*ucsb.edu [PDF]

DA Moon - Proceedings of the 1984 ACM Symposium on LISP and functional ..., 1984 - portal.acm.org  
... wmt for the inevitable exhaustion of virtual address space (at ... in its address by dividing virtual memory into equal ... up the address of the quantum in a table. ...  
[Cited by 277](#) - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

### [PDF] \*Microsoft Windows Internals: Microsoft Windows Server 2003, Windows XP, and Windows 2000

ME Russinovich, DA Solomon, DA Solomon - 2005 - ulb.tu-darmstadt.de  
... 444 Page Files 444 Virtual Address Descriptors 448 ... 658 Cache Virtual Memory Management  
660 Cache Size ... 667 Page 10. Table of Contents xv Cache Data Structures ...  
[Cited by 46](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 4 versions](#)

### [PDF] \*Virtual memory architecture in SunOS

RA Gingell, JP Moran, WA Shannon - Proceedings of the Summer 1987 Usenix Technical Conference - opensolaris.org  
... was the introduction of a virtual address cache in ... on its own to synchronize the "virtual memory cache" it ... Table 1 sum- marizes our refined interface ...  
[Cited by 96](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 64 versions](#)

### Method for managing virtual memory to separate active and stable memory blocks

DH Bartley, TJ McEntee, DW Oxley, SM Thattai - US Patent 4,660,130, 1987 - Google Patents  
... of the beginning of the available virtual memory space ... they are located in the virtual address space beginning ... Figures ASSOCIATIVE LOOK-UP TABLE 1XXXXXXX rffil ...  
[Cited by 46](#) - [Related articles](#) - [Web Search](#) - [All 6 versions](#)

### [PDF] \*Page Table Structures for Fine Grain Virtual Memory

J Liedtke - 1984 - Citeseer  
... Virtual Memory ... freely specifiable contiguous parts of the virtual address space.  
Since each segment is dened by a segment-table entry containing base address ...  
[Cited by 16](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 7 versions](#)

### Cm\*: A modular, multi-microprocessor

RJ Swan, SH Fuller, DP Siewiorek - Proceedings of the June 13-16, 1977, national computer ..., 1977 - portal.acm.org  
... All processors share access to a single virtual memory address space. ... Cm\* has  
a 2 28 byte segmented virtual address space. ... Relocation Table ...  
[Cited by 197](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

### Efficient software-based fault isolation- \*kfuqm.edu.sa [PDF]

R Wahbe, S Lucoc, TE Anderson, SL Graham - Proceedings of the fourteenth ACM symposium on Operating ..., 1994 - portal.acm.org  
... Hard- ware page tables prevent the code in one address space from corrupting the contents of another. Unfortunately, there is a high performance cost ...  
[Cited by 697](#) - [Related articles](#) - [Web Search](#) - [BI Direct](#) - [All 10 versions](#)

### Operating system support for database management- \*ucsb.edu [PDF]

M Stonebraker - Communications of the ACM, 1981 - portal.acm.org  
... address space. ... 6.1 Large Files Any virtual memory scheme must handle files which are large objects ... file will have an overhead of 100K bytes for the page table. ...  
[Cited by 436](#) - [Related articles](#) - [Web Search](#) - [All 37 versions](#)

### SoftFLASH: analyzing the performance of clustered distributed virtual shared memory- \*kfuqm.edu.sa [PDF]

A Erlichson, N Nuckolls, G Chesson, J Hennessy - ACM SIGOPS Operating Systems Review, 1996 - portal.acm.org  
... the page into the user's virtual address space ... must take faults, manipulate the virtual memory structures and ... Table 2 contains data measured from test programs ...  
[Cited by 109](#) - [Related articles](#) - [Web Search](#) - [BI Direct](#) - [All 17 versions](#)

[DAISY: Dynamic compilation for 100% architectural compatibility](#) - [psu.edu](#) (PDF)

K Ebcofjfu, ER Altman - [portal.acm.org](#)

... ma-chine, (= the low portion of VLIW virtual memory) there is ... tecture physical memory, is at VLIW virtual address  $nx \cdot N$  ... of memory as a hash table of translated ...

[Cited by 317](#) - [Related articles](#) - [Web Search](#) - [Bib. Direct](#) - [All 27 versions](#)

[Using shared virtual memory for parallel join processing](#) - [psu.edu](#) (PDF)

A Shatzlal, JF Naughton - ACM SIGMOD Record, 1993 - [portal.acm.org](#)

... hash table overflow) but are relatively insensitive to ... Shared virtual memory [LH89, CBZ91] provides a sin ... gle virtual address space shared by all the processors ...

[Cited by 58](#) - [Related articles](#) - [Web Search](#) - [Bib. Direct](#) - [All 15 versions](#)

[User scheduled direct memory access using virtual addresses](#)

RW Herrell, TP Morrissey - US Patent 5,301,287, 1994 - Google Patents

... host system, and each shadow page table is updated by ... a type is said to have virtual memory if the ... must therefore take place from the virtual address space of ...

[Cited by 44](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

[Design and implementation of power-aware virtual memory](#) - [usenix.org](#) (PDF)

H Huang, P Pillai, KG Shin - Ann Arbor - [usenix.org](#)

... used repeated page faults and page table scans to ... on modern operating systems, where virtual memory (VM) is ... be aware of their own virtual address spaces, and ...

[Cited by 64](#) - [Related articles](#) - [Web Search](#) - [All 15 versions](#)

[A recursive virtual machine architecture](#)

HC Lauer, D Wyeth - ... of the workshop on virtual computer systems table of ..., 1973 - [portal.acm.org](#)

... virtual address. Thus, processes at all levels run nearly as fast ... The latter table can also be regarded as a segment table! thus the ... virtual memory processes. ...

[Cited by 22](#) - [Related articles](#) - [Web Search](#)

[Method and apparatus for virtual memory mapping and transaction management in an object-oriented ...](#)

DL Weinreb, SJ Haradhyala - US Patent App. 10/944,444, 2004 - Google Patents

... 18 PERSISTENT RELOCATION VIRTUAL ADDRESS 919, MAP ENTRY (PRME ... ASSIGNMENTS RELOCATE MAP TO VIRTUAL MEMORY FURTHER USE ... IN THE SERVER'S OWNERSHIP TABLE NOT FOUND ...

[Cited by 78](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

[Optional virtual memory system](#)

KJ Thurber, JC Strauss - US Patent 4,128,675, 1978 - Google Patents

... USEGMENT TABLE \_L PPOINTER ... OPTIONAL VIRTUAL MEMORY SYSTEM ... Real, based and virtual addressing structures have 5 ther a real, based or virtual address structure. ...

[Cited by 28](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

[The impact of operating system structure on memory system performance](#) - [psu.edu](#) (PDF)

JB Chen, BN Berghad - ACM SIGOPS Operating Systems Review, 1993 - [portal.acm.org](#)

... A TLB miss on a user virtual address (iYTLB ... due to the simulator's model of the virtual memory system's ... strategy, similar to the one described in Table 2-1 ...

[Cited by 182](#) - [Related articles](#) - [Web Search](#) - [Bib. Direct](#) - [All 27 versions](#)

[Hybrid hardware/software method and apparatus for virtual memory address translation using primary ...](#)

DV James - US Patent 4,774,653, 1986 - Google Patents

... to permit user programs to execute code and fetch data from virtual memory addresses ...

Such a hardware table is called a Virtual Address Translation Table ...

[Cited by 15](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

[Application-controlled physical memory using external page-cache management](#) - [unomaha.edu](#) (PDF)

K Hary, DR Cheriton - [portal.acm.org](#)

... the kernel virtual memory system provides a page frame cache for the application to manage, rather than a conventional transparent virtual address space that ...

[Cited by 127](#) - [Related articles](#) - [Web Search](#) - [Bib. Direct](#) - [All 35 versions](#)

### Modularization and hierarchy in a family of operating systems

AN Habermann, L Flor, L Cooperider - Communications of the ACM. 1976 - portal.acm.org

... A **virtual address** of the form (w, d) indicates the wth WS segment ... In systems with more standard **virtual memory** facilities, a segment **table** is associated ...

[Cited by 142](#) - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

### DDM-a cache-only memory architecture- \*pdfx.edu [PDF]

E Hagersten, A Landin, S Haridi - Computer, 1992 - ieeeexplore.ieee.org

... protocol is called an item. On a memory reference, a **virtual address** is translated into an item identifier. The item identifier space ...

[Cited by 279](#) - [Related articles](#) - [Web Search](#) - [All 24 versions](#)

### Virtual memory management in Chorus

V Abrosimov, M Rozier, M Gien - Workshop on Progress in Distributed Systems and Distributed ... - Springer

... its capability or by a **virtual address** in the ... **Table 4** describes the operations that a mapper ... to implement a distributed **virtual memory** consistency maintenance ...

[Cited by 31](#) - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

### [CITATION] MONADS-PC: A capability based workstation to support software engineering

J Rosenberg, DA Abramson - Proc. of the 18th Hawaii International Conference on System ..., 1985

[Cited by 79](#) - [Related articles](#) - [Web Search](#)

### [PDF] \*The Spring virtual memory system

YA Khalidi, MN Nelson - 1993 - eprints.kupm.edu.sa

... to lock in physical memory specific **virtual address** ranges of ... between a pager and a **virtual memory** manager. ... **Table 1** summaries the differences between a MACH ...

[Cited by 63](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 27 versions](#)

### Cache memory system employing virtual address primary instruction and data caches and physical ...

GS Taylor, PM Farnwald, TP Layman, HK Ngo, AW ... - US Patent 5,542,062, 1996 - Google Patents

... Two of the most important are **virtual address** synonyms and ... **Virtual memory** is usually implemented by page **tables** which ... the format of a page **table** entry should ...

[Cited by 26](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

### Compile-time program restructuring in multiprogrammed virtual memory systems

SJ Hartley - IEEE Transactions on Software Engineering, 1988 - doi.ieeecomputersociety.org

... **virtual memory** system, parts of the linear **virtual address** space of ... in order to maximize system throughput, the **virtual memory** management system ... See **Table II** ...

[Cited by 26](#) - [Related articles](#) - [Web Search](#) - [All 9 versions](#)

### Fine-grain access control for distributed shared memory- \*kfuupm.edu.sa [PDF]

I Schoinas, B Faicafi, AR Lebeck, SK Reinhardt, JR ... - ACM SIGPLAN Notices, 1994 - portal.acm.org

... 1 Location of action depends on protocol state. **Table 1**: Taxonomy of shared-memory systems. Fine-grain access control can be implemented in many ways. ...

[Cited by 267](#) - [Related articles](#) - [Web Search](#) - [Ei, Direct](#) - [All 24 versions](#)

### TENEX, a paged time sharing system for the PDP-10

DG Bobrow, JD Burchfiel, DL Murphy, RS Tomlinson - Communications of the ACM, 1972 - portal.acm.org

... the pages in core memory in a "core status" **table**. ... **virtual memory** are specified by the **virtual memory** map of ... in that position in the **virtual address** space, and ...

[Cited by 144](#) - [Related articles](#) - [Web Search](#) - [All 9 versions](#)

### Tools for the development of application-specific virtual memory management- \*psu.edu [PDF]

K Krueger, D Loftness, A Vahdat, T Anderson - ACM Sigplan Notices, 1993 - portal.acm.org

... to the application's pager with the faulting **virtual address**. ... general-purpose **virtual memory** system. ... address map is similar to a kadtional page **table**. ...

[Cited by 60](#) - [Related articles](#) - [Web Search](#) - [Ei, Direct](#) - [All 3 versions](#)



#### Virtual address translator utilizing interrupt level code

RC De Ward, DG Kaminski, MP Fedde - US Patent 4,241,401, 1980 - Google Patents

... Most practical **virtual memory** data processing systems utilize a **Virtual Address Translator (VAT)**, often called a **Directory Look-Aside Table (DLAT)**. ...

[Cited by 21](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

#### Xen and the art of virtualization- \*hettl.org [PDF]

P Bernam, B Dragovic, K Fraser, S Hand, T Harris, ... - ACM SIGOPS Operating Systems Review, 2003 - portal.acm.org

... and the MMU-visible 'shadow' page table. This greatly increases the cost of certain

guest OS operations, such as creating new **virtual address** spaces, and ...

[Cited by 1325](#) - [Related articles](#) - [Web Search](#) - [St. Direct](#) - [All 122 versions](#)

#### Virtual memory on a narrow machine for an object-oriented language

F Kaehler - portal.acm.org

... word is not wide enough to hold a **virtual address** is the ... e field in object A. The

object **table** contains 20 ... be no worse than in a non-**virtual memory** system for ...

[Cited by 46](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

#### Rooms: the use of multiple virtual workspaces to reduce space contention in a window-based graphical ...

DA Henderson Jr, SK Card - ACM Transactions on Graphics, 1986 - portal.acm.org

... references, outlines, and notes can be spread on the **table** in a ... In a **virtual-memory** operating system, programs are run in a large, **virtual-address** space. ...

[Cited by 401](#) - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

#### Virtual address to physical address translation cache that supports multiple page sizes

YA Khalidi, GR Anderson, SA Chessin, Si Kong, CE ... - US Patent 5,479,627, 1995 - Google Patents

... Typically, the **virtual memory** operating system will provide a big software translation **table (BST)** 280 ... contains every translation from **virtual address** space to ...

[Cited by 48](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

#### An in-cache address translation mechanism- \*wisc.edu [PDF]

DA Wood, SJ Eggers, G Gibson, MD Hill, JM ... - portal.acm.org

... **Virtual memory** allows program size to be independent of the ... is maintained in a structure called a page **table**. A **virtual address** is used to index into the **table** ...

[Cited by 72](#) - [Related articles](#) - [Web Search](#) - [All 6 versions](#)

#### Virtual memory cache for use in multi-processing systems

SR Dashiell, BA Prasad, RE Rider, JA Steffen - US Patent 4,843,542, 1989 - Google Patents

... Then, for every **virtual address** tained near the associated processor ... ory If not>

it must be fetched from **virtual memory**. ... as the out-convers'on **table**, and to ...

[Cited by 64](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

#### Virtual memory management method and apparatus utilizing separate and independent segmentation and ...

JH Crawford, PS Ries - US Patent 5,321,836, 1994 - Google Patents

... 14, 1994 [54] **VIRTUAL MEMORY** MANAGEMENT METHOD AND APPARATUS UTILIZING SEPARATE AND ... Segmentation registers and an associated segmentation **table** in main memory ...

[Cited by 28](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

#### An implementation and analysis of the virtual interface architecture- \*kfsu.edu.sa [PDF]

P Buonadonna, A Geweke, D Culler - Proceedings of the 1998 ACM/IEEE conference on ..., 1998 - portal.acm.org

... **Virtual Memory**-Mapped Communication (VMMC) [9] is a model for ... **Table 2**: LogP Parameters and measured results. ... the VI NIC into the process's **virtual address** space ...

[Cited by 159](#) - [Related articles](#) - [Web Search](#) - [All 12 versions](#)

#### An efficient, incremental, automatic garbage collector- \*psu.edu [PDF]

LP Deutsch, DG Bobrow - Communications, 1976 - portal.acm.org

... sweep of the entire **virtual address** space, checking ... own transaction queue and count **tables** (perhaps both ... Garbage-Col-lector for **Virtual-Memory** Computer Systems ...

[Cited by 215](#) - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

### Virtual address to physical address translation using page tables in virtual memory

RE Steward, TE Leonard, ST Lee - US Patent 5,239,635, 1993 - Google Patents

... Since consecutive pages of the page table in virtual memory reside in consecutive page frames in physical memory, a virtual address in the page tables can be ...

[Cited by 10](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

### [PDF] •Shared virtual memory: Progress and challenges

L Itode, JP Singh - Proceedings of the IEEE, 1999 - CiteSeer

... SVM protocol provides a coherent shared virtual address space at ... using the local page table for access ... the performance of a shared virtual memory implementation ...

[Cited by 74](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [Bib. Direct](#) - [All 16 versions](#)

### Encrypting virtual memory

N Provos - Proceedings of the Ninth USENIX Security Symposium, 2000 - usenix.org

... the physical pages associated with a virtual address range into ... s. OpenBSD uses the UVM [ 7 ] virtual memory system. ... magnification factors are shown in Table 1 ...

[Cited by 55](#) - [Related articles](#) - [Cited](#) - [Web Search](#) - [All 74 versions](#)

### Scalability, fidelity, and containment in the potemkin virtual honeyfarm- \*cs.cmu.edu [PDF]

M Vrabie, J Ma, J Chen, D Moore, E VandeKlaft, AC ... - ACM SIGOPS Operating Systems Review, 2005 - portal.acm.org

... and protection; D.4.2 [Operating Systems]: Storage Management—Virtual memory; C.2.3 ... flow cache, packets are checked against a history table that maintains ...

[Cited by 110](#) - [Related articles](#) - [Web Search](#) - [Bib. Direct](#) - [All 30 versions](#)

### Organization and performance of a two-level virtual-real cache hierarchy- \*202.38.79.74 [PDF]

WH Wang, JL Baer, HM Levy - portal.acm.org

... Keywords: Caches, Virtual Memory, Multiprocessors, Memory Hierarchy, Cache ... natural place to put that table is at ... in the V-cache, the virtual address is trans ...

[Cited by 75](#) - [Related articles](#) - [Web Search](#) - [All 13 versions](#)

### IBM System/38 support for capability-based addressing

U Houdek, FG Soltes, RL Hoffman - Proceedings of the 8th annual symposium on Computer ..., 1981 - portal.acm.org

... Translating a large virtual address, IBM System/38 Technical Developments ... Figure 1. Conventional Virtual Memory (a) and Single-Level Storage (b ... HASH INDEX TABLE ...

[Cited by 41](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

### Distributed shared memory: A survey of issues and algorithms- \*cmu.edu [PS]

B Nitzberg, V Lo - Computer, 1991 - leeexplore.lee.org

... shared memory provides a virtual address space shared ... sharing and coherence through virtual memory-management mechanisms ... Table 1 compares how design issues ...

[Cited by 406](#) - [Related articles](#) - [Web Search](#) - [All 8 versions](#)

### Apparatus for providing shared virtual memory among interconnected computer nodes with minimal ...

J Sandberg, ... - US Patent 5,592,625, 1997 - Google Patents

... packet and subsequently "decodes" the virtual address in order ... organization of the page table associated with ... communications at a shared virtual memory level. ...

[Cited by 48](#) - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

### Mirage: A coherent distributed shared memory design

B Fleisch, G Popek - Proceedings of the twelfth ACM symposium on Operating ..., 1999 - portal.acm.org

... can share locations at different virtual address ranges ... with the current process's page table entries ... of these forms the process' virtual memory address space ...

[Cited by 297](#) - [Related articles](#) - [Web Search](#) - [All 8 versions](#)

### [PS] •Checkpoint and migration of UNIX processes in the Condor distributed processing system

M Litzkow, T Tannenbaum, J Basney, M Livny - 1997 - cs.wisc.edu

... dynamic library is mapped into the same area of virtual memory where it ... segment in the virtual address space. ... All of this information is kept in a table in the ...

[Cited by 214](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 9 versions](#)

... [increase the segment size of unix files in a page segmented virtual memory data processing system](#)

KE Duvalil AD Hooten, JC O'Quin III, TA Smith - US Patent 4,761,737, 1988 - Google Patents

... UNIX type Sys- tem Calls create and open files in **virtual memory**. ... 2,1988 sheet 4 of 10 4,761,737 **VIRTUAL ADDRESS** i (HASH) i HASH ANCHOR TABLE i INVERTED ...

[Cited by 26](#) - [Relevant articles](#) - [Web Search](#) - [All 3 versions](#)

Key authors: [K Li](#) - [R Rashid](#) - [M Young](#) - [D Golub](#) - [A Tevanian](#)

Google

Result Page:    1   2   3   4   5   6   7   8   9   10    [Next](#)

[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)

©2009 Google